

WHAT IS CLAIMED IS:

1. A method of locating a vessel lumen to enable placement of a vascular hole closure device comprising the steps of:
 - providing an elongated instrument;
 - providing a syringe having a plunger and containing a fluid therein;
 - connecting the syringe to the elongated instrument;
 - exerting a force on the plunger as it is inserted through the tissue towards the vessel wall; and
 - detecting movement of the plunger to eject the fluid to determine entry of the elongated instrument into the vessel lumen.
2. The method of claim 1, wherein the step of detecting movement of the plunger comprises the step of feeling the change in pressure of the plunger.
3. The method of claim 1, wherein the step of connecting the syringe to the elongated instrument comprises the step of threading the syringe onto the elongated instrument.
4. The method of claim 1, wherein the elongated instrument is an introducer sheath having a side opening formed in a wall and the step of depressing the plunger to eject the fluid ejects the fluid through the side opening.
5. The method of claim 4, further comprising providing a dilator within the introducer sheath and the step of depressing the plunger to eject the fluid ejects the fluid in the space between the dilator and sheath.
6. A method for locating a vessel lumen and placing a vascular aperture closure device inside the vessel lumen comprising the steps of:
 - providing an introducer sheath having an opening therein;
 - providing a syringe containing fluid communicating with an interior of the sheath;

depressing a syringe plunger to eject the fluid through the opening in the sheath as it is inserted through the tissue towards the vessel wall, the degree of depression being relatively small as the sheath remains within the tissue and outside the vessel;

detecting a change in the depression of the syringe plunger to indicate greater ejection of fluid to thereby indicate that the sheath is through a tissue tract and through a vessel wall aperture into the vessel lumen; and

inserting a closure member through the sheath and inside the vessel to seal the aperture in the vessel wall.

7. The method of claim 6, wherein the step of inserting the closure member comprises the step of inserting a closure member having a patch member having a dimension at least substantially equal to a dimension of the internal opening of the aperture to prevent egress of fluid through the aperture.

8. The method of claim 7, wherein the step of detecting a change in the depression of the syringe plunger comprises the step of feeling the change in pressure of the syringe.

9. The method of claim 7, further comprising the step of withdrawing the patch member against the internal opening in the vessel wall.

10. The method of claim 7, wherein the step of inserting the closure member includes providing a delivery instrument in the introducer sheath, and wherein after deployment of the patch member from the delivery sheath the delivery instrument is further withdrawn to expose clip legs of the closure member.

11. The method of claim 10, further comprising the step of utilizing the syringe to eject cool saline to the clip legs during delivery to maintain the legs in a cooled martensite state.

12. The method of claim 10, further comprising the step of removing the syringe and attaching another syringe to eject cool saline to the clip legs during delivery to maintain the legs in a cooled martensite state.

13. In combination a device for closing an aperture in a vessel wall and a device for locating the vessel lumen to ensure placement of the aperture closure device therein, the combination comprising:

an elongated member having a longitudinal axis and positionable inside the vessel against an internal opening of the aperture, the elongated member having a dimension at least substantially equal to a dimension of the internal opening of the aperture to prevent egress of fluid through the aperture;

at least two curved legs positionable outside the vessel to help retain the elongated member in position;

an introducer sheath having an opening for fluid injection therethrough and into the vessel lumen; and

means for detecting a change in the fluid ejection through the introducer sheath and into the tissue to determine when the introducer sheath is positioned inside the vessel lumen to ensure subsequent placement of the elongated member inside the vessel.

14. The combination of claim 13, wherein the at least two curved legs are composed of shape memory material.

15. The device of claim 14, wherein the elongated member is composed of a resorbable material.

16. The device of claim 13, wherein the elongated member is composed of a resorbable material.

17. The device of claim 13, wherein the introducer sheath is dimensioned to receive a dilator.